

LOW BORON E-GLASS COMPOSITION

ABSTRACT OF THE DISCLOSURE

Provided is a glass composition useful in preparing fiberglass, with the composition comprising SiO₂ in an amount ranging from 52-62 weight percent; B₂O₃ in an amount ranging from 3.5-5.5 weight percent; CaO in an amount ranging from 18-25 weight percent; MgO in an amount ranging from 0.5-4 weight percent; Al₂O₃ in an amount ranging from 10-15 weight percent; and Na₂O in an amount ranging from 0.25-2 weight percent. The glass composition has an HTV of no greater than 2300°F and a liquidus temperature at least 150°F less than the HTV temperature. The composition allows one to realize costs savings associated with lower batch costs and abatement requirements, without significantly increasing the energy required for melting the glass, reducing fiberization efficiency, or requiring the development of new bushing technology.